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EDUCATION FOR HEALTH—SOME PRINCIPLES AND THEIR APPLICATION*

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If an educational principle is sound it has wide applications. It is not specific to one situation; it is not the property of one profession. A valid principle in education lends itself to examination in many contexts and by many people. Although my remarks, examples and inferences are directed to the field of health education I hope that workers from other professions who are here will see the implications, if such exist, for their own tasks.

Many of the principles we have been using in health education might be questioned as to whether they can be dignified by the term "principle." To me a principle has more meaning if it is stated as a hypothesis—a hypothesis which has been tested and lends itself to further testing. Thus many of the principles in current use might better be called maxims. They are simple tools like the shovel and the hoe and some of them are losing their edge for effective work because inherently they offer no guide lines as to when or how the tool should be used. For example, "learn by doing," "start where people are," "involve all the people," etc., may be good tools but what do they mean? How useful, as they stand, are they in community diagnosis, program planning or program evaluation? It has become increasingly evident that we who are practitioners in health education must have not tools but tested hypotheses

to guide us in what is rapidly becoming a social engineering job. The practitioner needs basic concepts to help him in the diagnosis of a situation and concepts which enable him to develop and use methods appropriate to the diagnosis.

At present, we often use educational methods in stereotyped fashion. Because of this, creativity and "depth" results are not forthcoming. One of the reasons may well be that a sound theoretical background for methods is lacking. We have nothing to fall back on when we encounter new situations. For it is in new situations that a good theory is needed by any and all of us. Without basic theoretical concepts it is well nigh impossible to see the common and uncommon elements in differing situations. It is difficult to transfer what we know from the known to the unknown. As Kurt Lewin said, there is nothing more practical than a good hypothesis or theory.

In the preface to Malinowski's (1)† "A Scientific Theory of Culture and Other Essays," Huntington Cairns says of Malinowski: "He also saw theory in its practical aspects, not only as the instrument which enabled the fieldworker to anticipate his solutions, but, in the modern logical view as explanation. To him theory was the instrument which allowed inquiry to be something more than a mere fumbling with multitudinous possibilities; it was an indispensable guide

to the field worker in the selection of facts; it was a necessary element in any sound descriptive science."

It seems to me that our period of apprenticeship in health education is well over. We have, through pioneer work, identified a vast array of the problems in learning-teaching; we have fumbled, often successfully, with solutions to these problems. The task now is to bring together the theoretical concepts which will enable us to "anticipate solutions" and give us greater insight into "explanations" of why things turned out as they did.

PRINCIPLES FOR GROUP LEARNING

I have had to make a choice of the principles which I would present here. Those I have selected are pertinent chiefly to group learning situations. Other principles may be more important than the ones I have chosen.

Two Processes in Problem-solving

The first principle is this: *In every problem-solving situation there are two major processes at work; one, a process that is concerned with the task at hand; the other a process which is dependent on the dynamic impacts of personality needs, perceived threats and protective reactions of the members present.* Thus every group situation has two dimensions and it is possible to analyze separately, for working purposes, the progress of the group in terms of where the members are in each dimension. It is possible, too, for the health educator, on the basis of this analysis

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† See references at end of article.

to predict the role he may usefully play.

The defined steps on the task-oriented dimension from the identification and clarification of the problem to the decision making outcome are not difficult for us to see. Not so clear, however, are the steps which a group takes in the second dimension; that of resolving the feelings of its members. And it is only through this resolution of feelings, apparently, that creative energy of members is released to work on the task.

Especially helpful here has been the experimental and theoretical work of Bion (2) who postulates a framework of three stages of movement in the group-feeling dimension. The first stage is that of dependency—in which the group looks for a leader, someone to tell them what to do, someone to give them the answers. The second stage is one of sparring, of establishing one's place in the group. Protective mechanisms of fight and escape are used by all of us during this period. And when this battle of feelings is over (it may be a battle of one second or extended over weeks), the final stage is reached which Bion calls "pairing." This is the stage in which we as members accept ourselves for what we bring to the task and accept others. It is at this stage that, freed from the needs to assert ourselves, to defend ourselves, we are able to think and to share without fear.

What are the practical implications of this principle for us? Immediately we think of the staff meetings of our agency. To the educator, staff meetings are educational opportunities; they are the core of in-service growth of staff. The use and misuse of staff meetings is of vital concern to us. Again, all of us are members of working committees; committees in the agency, the community, the nation. Sometimes we find ourselves as chairman, leader, consultant, administrator or supervisors of others in various enterprises. What use do we make of this principle which states that in every problem-solving situation two major processes are at work?

First of all the principle gives us a framework within which we can make working diagnoses on two levels of movement in practically any situation. Thus we are comfortable whether we are called in at the be-

ginning of a series of meetings or enter midstream. On the one dimension of task-orientation, we may see a group struggling to come up with methods of solving the problem before the problem is defined in a way that has the same meaning for everyone; if this is the case we know what group role is needed and we participate on that basis. On the second dimension, through listening, observing the kinds and direction of interchange taking place, being sensitive to gestures and postures, it is possible to form a hypothesis that the group is still in the dependency stage and may continue that way unless help is given the chairman to see what he is doing, or methods are devised to enable the members to contribute to the solution of the problem. Again, the educator has a hypothesis whose correctness he may test in terms of what happens when he suggests new approaches.

That many health councils die, that staff morale is low, that there is turnover in staff of some departments and not in others, that cooperative enterprises between divisions or between agencies fail to bear fruit, may more often be the result of our neglect of the emotional dimension in staff and committee work than of lack of logical planning. It is hardly necessary to add that when we work with persons from cultural patterns or levels in the community socially far distant from one another and possessing different values and attitudes, we are in a no-man's land until these differences in values and understanding of feelings about them are the common possession of the group. Perhaps this hypothesis concerning the two dimensions of working groups lies behind our simple maxims of "Take time; have patience; don't move until the group is ready to move."

Use of Perceptions in Planning

A second principle in education in health is this: *The perceptions of those who are to be taught furnish important data to be used in program planning.*

In a recent book by Simmons and Wolff, (3) "Social Science in Medicine," the thesis is developed that diagnosis, treatment and rehabilitation in disease must take into account the manifold ways in which the patient perceives the situations and stresses which his society and culture bring

to bear on him. Medical care thus becomes more than the treatment of a disease; it implies treatment of a disease in a man who is a reacting organism in a dynamic world. Repeatedly the authors stress that it is not a given situation or crisis which produces symptoms in the patient; it is his perception of the situation and the threats which this perception hold for him.

Saunders in (4) "Cultural Differences and Medical Care" when contrasting the perceptions of Spanish-speaking Americans and Anglo-Americans with regard to concepts of "time," "change," "acceptance," "rejection," "formal organizations," etc., makes it all too evident that program planning of any kind will lead to failure if knowledge and appreciation of existing differences in perception are not taken into account. The case studies of Spicer (5) and Paul (6), the work of Foster (7) and Kelly (8), all these give us direct evidence that planning for other people instead of with them is a very wasteful use of professional effort.

It is not difficult to see these differences in perception and what happens when we neglect them—if two very different cultures are juxtaposed. It is quite another thing to recognize and accept the existence of differences in perception of the people with whom we work every day. For example: There are probably no two persons here in this audience having identical perceptions of what I am trying to do this morning, yet the tendency for each of us will be to think that other persons see the situation exactly as we do. Each one of us has different meanings for the words I am using, different attitudes as to the value or worthlessness of the concepts. It is not until we share and explore our different perceptions that it is possible to have a discussion which makes sense.

Thus a great need at present in health education is for studies of the perceptions of people just like us. We need, too, dozens of significant studies in perception before we will have data, which are better than hunches, to guide us in the programs we are attempting in the chronic diseases, accident prevention, care of the aged, prenatal education, and fluoridation.

The older study of Schwackhamer (9) "Choice and Change in Doctors" and Koos' (10) study of Regionville indicate the wealth that will be ours when we know what values, fears, misconceptions, reactions, are held by different groups within our social structure. Not until we have such knowledge will we be able to use other than empirical approaches in developing interagency committees, defining functions of Councils of Social Agencies, helping board members and staffs of voluntary agencies to see their goals through the same eyes, improving educational work with patients and staff in hospitals, putting new life into food service courses, arguing for flexibility in health department policies and procedures and, in truth, meeting the needs of the communities we serve.

In the meantime, lacking research data, we peck away at the problem. We obtain crude ideas of the perceptions of neighborhood groups through creating permissive climates in which the people have freedom to express their wants and feelings. The training and supervision of health education aides in Peru have prepared these aides to obtain many perceptions of needs, values, attitudes and health practices in villages that the professional health worker often fails to take into account. It is in this light of regarding perceptions as data for program planning that I interpret Biddle's (11) theories in training community leaders, Wale's (12) work in Puerto Rico, the community enterprises all over the world of the Friends Service Society, and the emphasis on community development which is part of India's long-range program. To me all these efforts stem from the principle that the perceptions of the people to be "changed" are basic to planning.

A more valid approach, but one not always available to us is that of employing a behavioral scientist to obtain data on perception for us. An example will illustrate what I mean. Public health workers in California are concerned with the relative ineffectiveness of service and educational programs for Spanish-speaking Americans. The incidence of tuberculosis, infant and maternal death rates, occurrences of juvenile delinquency—

all are high among these people. Several approaches have been tried. More physician time has been given to schools and clinic services. Nurses and sanitarians, who speak Spanish have been employed. Educational materials in Spanish have been prepared. The results have not been noteworthy.

Through the joint sponsorship of the Bureau of Health Education of the California State Department of Public Health and the University of California School of Public Health a few thousand dollars were secured from the Rosenberg Foundation for a research project under the direction of a cultural anthropologist. A community served by a county health department which had better success than many in serving Spanish-speaking people was selected for the study. In a few months time the findings opened up hitherto unknown facts about the group. Factions within the group were shown to exist; power figures discovered; many unknown autonomous subgroups brought to light; attitudes toward health practices and medical care described; channels for obtaining information pinpointed; some of the value systems uncovered. It is now possible for the health department staff to begin a training program for themselves to figure out how each staff member will need to adapt his work or change his methods of teaching.

One final illustration of the importance of "perceptions held" for program planning is found in the problem now confronting those of us from North Carolina and California who are starting our training programs in health education on Indian reservations. How can we glean from the voluminous anthropological studies the understandings we must have? How, over the barrier of language differences, can we secure the perceptions of health practices as the Indian sees them? How can the urge to bring to the Navajo what we know is good for him be kept under control until we learn what the Navajo sees as being good for him?

Is it this second principle we have in mind when we say, "Start where people are?"

During the past two years I have grown weary with my own attempts to emphasize the various factors conducive to bringing about "change."

From many angles, we have looked at "motivation," the psychological nature of "participation," the building of "new frames of reference through discussion-decision techniques." But when these factors are treated in isolation the relationship between them is not seen. It has been a heart-breaking experience in working with students to have spent hours in the laboratory on problems in which the participatory experience has been exciting and productive, only to have a student ask "Now when are we going to learn something about motivation?"

Planning Process Has Changed Potential

Thus through dissatisfaction with this type of piece-meal psychological analysis of how learning or "change" takes place, and the inadequacy of this approach for practitioners in health education, I have come to a very simple principle which for many months I have been consciously testing. It is this: "The planning process itself is an educational method which has the potentialities for stressing the major psychological factors which bring about 'change'." This is my third principle.

If it is a valid principle it may serve also as a criterion to be used by health education workers in answering the question: "To which activities should I devote a major portion of my time?"

Let us look at the planning process for a moment. It is called into play in problem-solving situations. Thus the principle of working in the two dimensions of task-orientation and feeling is consistent. Since different people are involved in planning, the principle pertinent to securing the understanding of perceptions held is present. But also inherent in the planning process is a galaxy of psychological factors, each of which has been tested as to its efficacy in the learning process. We say that there must be *motivation*. If we believe, with Allport (13), that motivation to activity is aroused in the organism's effort to reduce tensions of one kind or another, does this definition of motivation hold in the planning process? I believe it does; I believe that planning is a tension-reducing process; and that as such it serves as a motivating situation whether it be plan-

ning the production of a pamphlet or planning a state-wide institute on prematurity.

It has been interesting during the past year to note this phenomenon of reduction of tension in work committees made up of graduate students. Great variability exists among students in their tolerance for the "uncertainty" present in democratic planning procedures; great variability, therefore, in their perceptions of the time necessary to work through the interpersonal tensions which are part of the planning. But whatever may be the personality needs students bring to the planning meetings, the underlying tension to be resolved is that of producing a plan which meets their stated or unstated criteria of success. The relief from tension when the task of planning is finished appears to be comparable to the satisfaction of a fine dinner after great hunger.

Each planning situation, too, appears to offer the possibilities for inducing "change" found in the classical studies of Kurt Lewin (14) and his students.

For here in planning sessions both small and large groups become ego-involved and group-goal-involved. Members develop goals and methods to reach their goals. They become a small temporary unit in society with a frame of reference peculiarly theirs. They become peers; they can, without fear, listen to, test, accept new ideas and attitudes. They set their own rate of "change." They develop common perceptions related to the task at hand.

This principle that the planning process is a major educational method is used by all those who have planned national and international seminars. That it is not accepted by all health workers, however, is evident. Especially so is this lack of acceptance seen in the kinds of courses and curricula in the health field that have become stereotyped. I have in mind the extension courses and summer courses in health education for teachers; the prenatal and infant care courses for mothers; the courses for food service workers; the programs with P. T. A. and other agencies. We become so fascinated in getting a captive audience which will listen to what we think they should know that we

forget entirely the answers to the question "How do people learn; how do they change?" We have forgotten Deering's (15) wise words "We do not easily give up something which we have helped to plan."

Community Organization Is Complex Process

A fourth principle is concerned with community organization. It may be stated something like this:

Bringing people together to work on problems (often called community organization) is a complex process involving: (1) analysis of the validity of the objectives for the group; (2) relation of objectives to the various levels and kinds of power structure in the community, and; (3) the concepts of leadership held by professional workers.

There is probably no one here who at some time or other has not questioned the validity of the formal and informal community groups whose obvious objectives are concerned with some phase of health services or practices. We have participated in health committees of the Council of Social Welfare, neighborhood health councils, school health committees, or health education committees of the voluntary health agencies. We may have been instrumental in helping in the birth of a new health committee. Often these have been frustrating experiences—monthly luncheon meetings with one group; exciting weekly meetings with another which grew into less and less exciting sessions until finally it was a "chore" to attend; school health councils that started with such fine objectives and deteriorated into "program" sessions; time spent in so many meetings with so few results.

We health workers have been at fault. Our colleagues in the welfare and education fields have been equally culpable. We have been ignorant of the existence or feared the 40 decision-makers of Floyd Hunters' (16) community. Yet in our councils composed largely of professional workers we have broken our hearts over problems whose solution lay in their hands. We have huddled together in the safety of our common convictions and failed to think of the many ways in which these 40 men and women might become involved in the "change" process.

But other levels and kinds of power exist in a community which are related to other problems. Surely the power structure in a community which can decide whether a new factory shall be introduced is not the power structure which will have the final decisions as to whether a multiphasic screening program shall be started, whether fluoridation shall be voted in, or that mothers shall, from their own convictions, decide to have a prenatal examination before the fourth month of pregnancy. Who are the gatekeepers, the opinion-makers, the decision-makers, in these situations? And shall the leadership be tightly held by the health officer, the health educator, or the executive secretary and staff of the Welfare Council for each and every type of health concern? Moreover, how do the concepts of leadership held by these professionals affect the groups with which they are associated? Is then the term "community organization" misleading? May it be detrimental to the development of the many different kinds of working groups needed in the community? The answers to all these questions will be found only after a sober analysis of the meaning of this principle as it applies to a particular community at a given point in time.

Social Distance Is Significant Factor

Hydriek (17) in his work in Java in the early 1920s was one of the first workers in health to make practical application of the fifth principle, namely: *The social distance between the educator and the group taught is a significant factor in education.* This principle was incorporated into the Cincinnati Unit Plan of 1919 and in the early health education demonstrations in New York City. Of late years, however, it seems to hold less importance for us. That it is sound psychologically, I have no doubt, though there are certain unique situations in which it should be tested.

The many studies in social stratification have intrigued me as a health education practitioner. I ask myself, "What do these findings about class structure, social mobility, and social status hold for me?" By themselves they mean little but when, accepting the data, I bring into play the dynamics of the psychology of learning

by individuals, and the dynamics of group interaction new perspectives are opened up. Descriptive data suddenly become data to be used in program planning.

How much simpler it becomes to explain the meager results of health campaigns and the wastefulness in propaganda distributions, to account for the rejection by a community of health measures which they themselves have said they wanted. And light dawns as to the real nature of the barriers which so often are raised in community, state and nation by groups fearful of social mobility. Surely no country has more communication problems because of social distance than we, made up as we are of peoples from all over the earth and each of these people with its own class and status hierarchies.

To me unanswered at this time are questions like these: "For what types of problems is sanction or approval by status persons a necessity? In which of our subculture patterns is status important in sanctions for 'change'? How can we prepare leaders selected from a defined social class without creating social distance between the newly trained leader and the group from which he came?"

We need, however, to ask similar questions in work closer to home. Do we need, in official and voluntary health agencies, to find, train and employ "change-agents" who are closer to the understandings and value patterns of the groups needing help? In building and maintaining our own professional status is it possible that we have forgotten why we are in the health field?

The incorporation of volunteers into the school and clinic programs is one of our few concessions to the principle of social distance. Yet here again the objectives of using volunteers, their selection, training, and the kinds of work they are given to do creates a confused picture. And when one sees the use of Junior League members in clinics in an underprivileged district one wonders if the over-all objective was the "education" of the Junior Leaguer or hoped-for "change" in the mothers attending the conferences. The social distance between worker and client in this case does appear to be somewhat exaggerated.

The community education work in Puerto Rico, Japan, and India appears to be trying to reduce the social distance between worker and the community as part of a planned effort to bring about "change." Yet those of you who have seen the Ford Foundation film, "Life in the Village," must have wondered, as I did, if the social distance factor is still not a formidable barrier. Hydrick's selection of health visitors in Peru with whom I talked seemed to be much closer socially to the people with whom they worked.

Evaluation Helps Change

The last principle is one that never seems to fail if it is used intelligently with full recognition of the other principles I have presented. It is a principle upon which I fall back when all else seems to fail in bringing about "change." It is this: *Evaluation of educational programs and methods by staff provides a supporting structure for introducing changes in content and methods.*

We talk about evaluation in health education *ad infinitum*. No program planning is complete without at least lip service to its importance. I suspect, however, that we practitioners are doing a bit better than formerly in stopping at various steps in our programs to ask "How well did we do?" But evaluation as a practical reality in health administration is not easy to do. The staff is a working staff; there are services to be rendered. The concept of evaluation is foreign to many lay board members and the public in general. A perception of professional people expressed frequently by citizens is that the professional man is trained and knows his job. The realization that the job could be better done arises only when either incident or crisis reveals gaps.

Yet for attacking stubborn quarter-century or half-century-old practices which are ineffective, wasteful of money and professional time; for helping administrators to perceive health education as something more than information giving; in difficult situations like these, the shared experience of evaluating the educational program of the agency may be the only way that status persons (administrators, supervisors and board members) can become receptive to the data

they need to understand how people change.

In this joint endeavor, health educators need to bring to the staff the best resources the community and state has in health education or an allied field. For the evaluation, to be effective, will not belabor the statistics of mailing lists, pamphlets distributed, motion picture audiences and speeches given. It will be concerned about the changes in knowledge, attitudes and behavior that have taken place because of these educational exposures. Perhaps, if no additional funds are available, a very small section of a city might be polled by health department staff and trained volunteers to ascertain if any of the objectives of the educational program (safety education, obesity prevention, cancer control) have been reached. In this way the staff gets its own insights into the "facts of life" about the learning process and becomes the first to wish for changes in methods.

A very wise health officer in one of the district offices on the Navajo reservation made his own personal evaluation of the educational methods his staff had been using. "It is funny," he said, "we have been showing movies and giving talks on sanitation every night for the past six months but I don't think I could put my finger on a single thing that is different because we have done all this work. The Indians look and they listen—but I wonder if they *really* look and listen. There must be other ways of doing education." When his staff is able to join him in as simple an evaluation as this—other ways will be forthcoming.

Another effective use of informal evaluation methods has been used by a health department staff near our school. At the request of the health education staff each division director drew up a list of the most important tasks on which the division wanted help from the educational division. The discussion of this vast array of services became the subject matter of weekly staff meetings for two months. Criteria were developed for choosing the services to which the health education staff should give priority. Through these staff meetings not only was created a realistic health education program for a large department

but also were laid the basic corner stones of sound education principles such as I have presented.

Through evaluation techniques of one kind or another we may some day, in the not too distant future, put an end to a fragmentation of learning about health that now besets many communities. I refer to the three or four week health campaigns and to the health days and health weeks in which some health educators still are expected to participate. Fund raising and change in behavior are two entirely different objectives. Often the same educational methods are used for both. Evaluation studies may bring out this difference.

What have I tried to say? It is this. There are many principles based on theory which we are testing daily in our educational work. Some of these principles or hypotheses stand up better under testing than others; further work will lead possibly to their revision. At the moment the six principles I selected for this presentation are bases for considerable creative experimental work in the field. There are others equally stimulating but I shall leave those for another day and another speaker.

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Public Health Positions

Alameda County

Public Health Nurse: Salary range, \$375 to \$459. Reach maximum in three years. County car supplied. Apply to James C. Malcolm, M.D., Alameda County Health Department, 15000 Foothill Boulevard, San Leandro.

Santa Barbara City

Sanitarian: Salary range, \$358 to \$436. Eight cents per mile car allowance. Generalized urban program. Apply to Helen Hart, M.D., Santa Barbara City Health Department, 2 De La Guerra Plaza, Santa Barbara.

Contra Costa County

Public Health Nurse: Salary range, \$377 to \$453. Continuous testing; will test in candidates' home area. Requires R.N. and P.H.N. certificates. Contact Contra Costa County Civil Service, Box 710, Martinez.

Oakland Visiting Nurse Association

Supervising Nurse: Salary range, \$460 to \$520. Requires B.S. degree in public health nursing and at least two years' experience. Apply Executive Director, Visiting Nurse Association, Oakland 10.

Santa Clara County

Sanitarians: Salary range, \$392 to \$478. Four positions open. Requires California registration or qualification to take next registration examination. Car required. The county is a member of the California State Retirement System. For further information write to Irvin M. Falliak, Director of Sanitation, 2220 Moorpark Avenue, San Jose.

Bay Area Air Pollution Control District Enters New Phase

The Bay Area Air Pollution Control District, established in September, 1955, by act of the Legislature, went into active operation on October 1st with a newly appointed control officer, Mr. Benjamin Linsky, at the helm. Mr. Linsky was formerly chief of Detroit's smoke abatement bureau and is currently president of the National Air Pollution Control Association.

The acceleration of the Bay district's operation is the most recent manifestation of California's determined effort to reverse the tide of air contamination in its growing communities. The creation of the Bay area district by special law in 1955 followed the expression of serious concern on the part of the community over the increasing pollution of the air in the San Francisco area.

The district includes six participating counties—Alameda, Contra Costa, Marin, San Francisco, San Mateo and Santa Clara. Actually, the district outlined by the law takes in a related area within the boundaries of nine counties but three—Sonoma, Solano and Napa—are exempted from joining with the Bay area district until such time as they specifically request inclusion.

The seventh air pollution control district to be formed under California law, the Bay district is the only one so far to be organized as a multi-county unit. All the others—Los Angeles, San Diego, Riverside, Santa Clara and Orange County—are one-county districts. The Santa Clara district will cease operation as a district as soon as the Bay Area Air Pollution Control District can take over its present activities. As of October 1st, as authorized by law, the new district may actively set up regulations aimed at abating air pollution in all six counties.

The territory encompassed in the Bay area district has meteorological conditions somewhat similar to that of the Los Angeles Basin and there has been increasing evidence that smog can get to be as serious a problem and as disfiguring a one in the San Francisco area as in the Los Angeles. The legislation creating the

district was drawn up jointly by representatives of the six counties concerned. In the law, authority is granted to the district to carry out an inclusive program of air pollution control including fact finding, work with existing local, state and federal agencies, regulating the discharge of wastes into the air and enforcing regulations.

A 12-member board, made up of two representatives of each county, will direct the Bay area district as provided by law. Of the two representatives, one will be a city councilman and the other a county supervisor. The key appointed official will be the air pollution control officer. The board and the control officer will be able to seek consultation from an advisory council of 20 representatives from various fields of endeavor in the community—agriculture, architecture, community planning, industry, labor, medicine, professional engineering, health agencies, transportation and the public at large.

As to the responsibilities of the district in contrast to that of the State Department of Public Health, the former was created to take full responsibility for investigating the causes of air pollution in the Bay area and for setting up rules and regulations as well as carrying out enforcement on the local plane. The State's responsibility remains in the realm of investigation and consultation. The state program is also responsible for training, surveillance on a state-wide basis, coordination, public information and interpretation.

The air pollution control program of the State Health Department is vested in the Bureau of Air Sanitation, working in conjunction with the Bureau of Chronic Disease which is interested in the medical aspects of air pollution. Mr. John Maga is Chief of the Bureau of Air Sanitation.

Food Poisoning Traced To Potato Salad

A food poisoning outbreak in Santa Cruz, involving 142 persons and following a luncheon at a private school, was traced by the Santa Cruz County Health Department to potato salad. Approximately 300 persons, many from Los Angeles and San Francisco, attended the luncheon; only those

Special Census Releases *

Special Censuses of California Cities, **Series P-28 Contra Costa County:** Pittsburg (911); **Humboldt County:** Eureka (903); **Los Angeles County:** West Covina (900); Glendora (904); Beverly Hills (913); **Monterey County:** Seaside (905); **Orange County:** Buena Park (906); **Riverside County:** Riverside (919); **San Bernardino County:** Rialto (901); Ontario (910); **San Mateo County:** San Bruno (909); **Ventura County:** Oxnard (902).

Special Censuses Conducted by the Bureau of the Census Between January 1, 1956 to March 31, 1956. Bureau of the Census, Series P-28 No. 896.

The Monthly Report on the Labor Force: June, 1956. Bureau of the Census. Series P-47 No. 168.

Provisional Estimates of the Population of the United States, January 1, 1950 to June 1, 1956. Bureau of the Census, Series P-25 No. 140.

Copies of these releases may be obtained from: Library, Bureau of Foreign and Domestic Commerce, United States Department of Commerce at 419 Customs Building, 555 Battery Street, San Francisco, Calif., or at Room 450, 1031 South Broadway, Los Angeles, Calif.

* In ordering, specify series and number as shown in parentheses. These numbers are not population figures.

who ate the potato salad became ill. Laboratory cultures revealed the causative organism to be staphylococcus.

Explosive onset of symptoms occurred from three to six hours after eating and consisted of nausea, vomiting, abdominal cramps, diarrhea, chills and moderately severe prostration. Malaise continued from two to three days after onset of acute symptoms.

The potato salad was prepared one day prior to serving and was not kept under refrigeration at any time. Room temperature at the time of investigation was 72 degrees.

Dr. Rivers Appointed Medical Director of N. F. I. P.

Dr. Thomas M. Rivers, formerly vice president of the Rockefeller Institute of Medical Research, has been appointed medical director of the National Foundation of Infantile Paralysis to succeed Dr. Hart E. Van Riper. Dr. Rivers assumed his new post on November 1st; he was assistant to the president prior to his current appointment.

Dr. Rivers has been a member of the New York City Board of Health for the last 17 years. He is also president of the Society for Experimental Biology and Medicine. Since 1934 he has held membership in the National Academy of Sciences. He is a 1909 graduate of Emory College and took his M.D. degree in 1915 at Johns Hopkins University.

Laboratory Exhibit Wins Award At California State Fair

An exhibit prepared by the California Association of Medical Technicians was awarded a plaque for "distinguished educational exhibit" at the state fair this year. Miss Lucy French, associate microbiologist, Laboratory Field Services, State Department of Public Health, as chairman of the association's exhibit committee, was responsible for the preparation of the prize winning display.

The exhibit consisted of demonstration of blood chemistry and hematology, with the background theme, "The Medical Laboratory Technician Is a Part of the Medical Team."

New National Committee Formed to Promote Fluoridation

Formation of a new national committee in support of water fluoridation, the Committee to Protect Our Children's Teeth, Inc., was recently announced in New York. Chairman of the committee composed of medical, dental, and civic leaders, is Dr. Benjamin Spock, one of the nation's best known pediatricians.

Purpose of the committee is to spread facts and correct information on fluoridation of water supplies. Its first campaign will be concentrated in New York City where the board of health has repeatedly recommended fluoridation.

The committee, still in process of formation, already has more than 125 members. Persons in many parts of the Nation have joined the committee

because "New York's decision will be pivotal and perhaps decisive in advancing the measure across the country."

Vice chairmen of the committee are Mrs. Mary W. Lasker, president of the Albert and Mary Lasker Foundation; Basil O'Connor, president, National Foundation for Infantile Paralysis; Dr. Thomas Parran, dean of the graduate school of public health, University of Pittsburgh and former surgeon general, United States Public Health Service; and Dr. William P. Shepard, second vice president for health and welfare, Metropolitan Life Insurance Company.

Headquarters of the committee are at 105 E. 22d Street, New York 10.

Comparative Data for Cases of Selected Notifiable Diseases, California Month of September, 1956

Diseases	Cases reported this month			Cumulative cases from		
	1956	1955	1954	1956	January 1 1955	1954
Anthrax	--	--	--	--	--	--
Botulism	--	--	--	4	1	4
Brucellosis	2	2	5	20	44	34
Coccidioidomycosis ¹	12	19	6	121	98	48
Diarrhea of newborn	--	8	--	6	18	37
Diphtheria	1	--	3	26	16	16
Encephalitis, acute ²	39	31	145	421	315	501
Gonococcal infections	1,240	1,206	1,577	11,164	11,240	12,416
Hepatitis, infectious	130	132	188	1,426	1,421	1,718
Hepatitis, serum	7	7	2	70	45	39
Leprosy	--	3	--	7	15	9
Leptospirosis	--	--	1	3	2	2
Malaria	12	6	8	36	27	30
Measles	402	443	521	29,908	65,743	57,284
Meningococcal infections	10	10	21	195	200	234
Mumps	597	1,181	928	30,249	28,348	27,562
Pertussis (whooping cough)	210	269	677	1,717	4,331	3,534
Polio myelitis—total	320	343	1,101	1,652	1,394	3,573
Psittacosis	3	3	7	27	28	50
Q fever	3	3	NR	52	11	NR
Relapsing fever	--	--	1	--	11	1
Rabies, animal	9	35	4	244	257	63
Rocky Mountain spotted fever	--	1	--	2	3	1
Salmonellosis	63	70	65	876	740	596
Shigellosis	155	116	106	1,292	890	728
Streptococcal infections (including scarlet fever)	202	140	224	4,124	6,149	6,799
Syphilis	1,224 ³	457	662	5,486 ³	5,207	5,310
Tetanus	2	5	5	23	28	32
Trachoma	--	4	--	4	6	24
Trichinosis	1	--	2	9	4	29
Tuberculosis	483	620	682	5,387	5,525	5,991
Tularemia	--	1	4	4	3	10
Typhoid fever	13	8	19	79	71	84
Typhus fever, endemic	--	--	1	2	1	3

¹ Since July 1, 1955—Active primary (including cavity) and disseminated coccidioidomycosis reportable.

² Encephalitis, acute, includes arthropod-borne infections, postinfectious cases, and those with etiology undetermined.

NR—Not reportable prior to July 1, 1955.

³ Includes 504 cases from special serologic survey (Mexican National farm workers).

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